

active layer, and dual layered source and drain electrodes that are each comprised of a transparent conductive material that extends over and contacts the ohmic contact layer, and a metal material that extends over the transparent conductive material and that wraps around an end of the transparent conductive material to contact the ohmic contact layer[.];

wherein the gate electrode blocks light passed by the first surface from reaching the active layer, and wherein the ohmic contact layer rests on the active layer. --

REMARKS

At the outset, Applicants wish to thank the examiner for the courtesies extended to the Applicants' representative during the telephone interview on November 22, 2002.

Claims 1, 3, 4, 9, 15, 17 and 18 were pending. This Amendment adds new claim 21. Reexamination and reconsideration of the subject application and pending claims 1, 3, 4, 9, 15, 17, 18 and 22 are respectfully requested.

The September 3, 2002 Final Office Action rejected claims 1 and 4 under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 5,466,620 to Bang. ("Bang") in view of the Related Art shown in the application. The rejection of claims 1 and 4 is respectfully traversed and reconsideration is requested. Claims 1 and 4 are allowable over the cited references in that each of these claims recites a combination of elements including, for example, "a sensor thin film transistor (TFT) generating optical current" and "a switching TFT controlling a release of the stored charges, the switching TFT having a gate electrode, an insulating layer on the gate electrode, an active layer on the insulating layer, an ohmic contact layer on the active layer, and dual layered source and drain electrodes that are each comprised of a transparent conductive material that extends over and contacts the ohmic contact layer, and a metal material that extends

over the transparent conductive material and that wraps around an end of the transparent conductive material to contact the ohmic contact layer.”

None of the cited references including Bang and the Related Art shown in the application, singly or in combination, teaches or suggests at least these features of the claimed invention. Accordingly, Applicant respectfully submits that claim 1 and claims 3, 4, and 9, which depend from claim 1, are allowable over the cited references.

The USPTO also rejected claims 3, 9, 15 and 17 under 35 U.S.C. §103(a) as being unpatentable over Bang and the Related Art disclosed in the application, and further in view of U.S. Patent No. 5,656,824 to den Boer et al. (“den Boer”). With all respect to the Examiner, the rejections of claims 3, 9, 15 and 17 are traversed.

With respect to claims 3 and 9, Applicants respectfully submit that they are allowable over the cited references because they depend from an allowable base claim – claim 1.

With respect to claim 15 and 17, the rejection of these claims is respectfully traversed and reconsideration is requested. Claims 15 and 17 are allowable over the cited references in that each of these claims recites a combination of elements including, for example, “a sensor TFT having a gate electrode and spaced apart first and second sensor electrodes” and “a switching TFT.” None of the cited references including Bang and den Boer, singly or in combination, teaches or suggests at least this feature of the claimed invention. Accordingly, Applicant respectfully submits that claim 15 and claim 17, which depends from claim 15, are allowable over the cited references.

Claim 18 stands rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 5,821,133 to Kawai et al. ("Kawai") in view of den Boer. ("den Boer"). The rejection of claim 18 is respectfully traversed and reconsideration is requested. Claim 18 is allowable over the cited references in that this claim recites a combination of elements including, for example, a TFT with "spaced apart first and second electrodes that electrically contact the contact layer so as to define a channel region", "wherein the second electrode of the TFT is a dual layer structure comprised of a transparent conducting layer that electrically contacts the contact layer and of a non-transparent metal layer that is disposed over the transparent conducting layer, wherein the non-transparent metal layer extends over an end of the transparent conducting layer to electrically contact the contact layer." None of the cited references including Kawai and den Boer, singly or in combination, teaches or suggests at least this feature of the claimed invention. The foregoing distinctions are important, with advantageous being taught in the subject application. The Examiner's attention is directed to the subject application, beginning on line 11 of page 8. There, the inventors describe how the transparent material functions as a hole barrier, which results in a reduced OFF state leakage, while the metal material maintains the ON state current. The Examiner's attention is also directed to Kawai et al.'s lack of disclosure related to transparent materials and metal materials that both contact the contact layer. Thus, Kawai et al. does not suggest the advantages taught by the subject application. Accordingly, Applicant respectfully submits that claim 18 is allowable over the cited references.

In view of the foregoing, claims 1, 3, 4, 9, 15, 17, and 18 are believed allowable. If for any reason the Examiner finds the application other than in condition for allowance, the Examiner is requested to call the undersigned attorney at (202) 496-7500 to discuss the steps

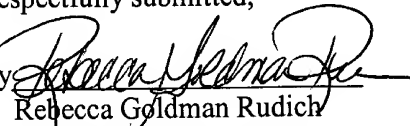
necessary for placing the application in condition for allowance. All correspondence should continue to be sent to the below-listed address.

In view of the above, each of the presently pending claims in this application is believed to be in immediate condition for allowance. Accordingly, the Examiner is respectfully requested to withdraw the outstanding rejection of the claims and to pass this application to issue.

Dated: December 3, 2002

Respectfully submitted,

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